REMARKS

In the Office Action dated April 6, 2006, claims 1-38 are pending, claims 1-8 and 10-15 are rejected, objection is made to claim 9 and claims 16-38 are withdrawn from consideration. applicants appreciate the acknowledgement of patentable subject matter at least in claim 9. Reconsideration is requested for at least the reasons discussed hereinbelow.

Applicants note the Examiner's request regarding the specification and will correct any errors noticed during the examination.

The present invention, as set forth in claim 1, is directed to a twisted nematic liquid crystal display device for conducting a display operation in the Normally Black mode, wherein the liquid crystal display device further includes

a first optical compensator, which is provided between one of the two polarizers and the liquid crystal cell so as to compensate for the wavelength dependence of the angle of rotation of polarized light passing through the liquid crystal layer in a black display state, and

a second optical compensator, which is provided between the first optical compensator and that polarizer so as to compensate for the wavelength dependence of the ellipticity of the polarized light passing through the liquid crystal layer in the black display state.

Claims 1-8 and 10-15 are rejected under 35 U.S.C. §103(a) over Shimoshikiryou et al. (US 6,717,645; " Shimoshikiryou") in view of Saiki et al. (US 6,747,720; "Saiki"). The Examiner admits that Shimoshikiryou does not disclose that "the first optical compensator can be changed the polarization direction of linearly polarized light ray aligning the elliptically polarized light ray as well as the second optical compensator can be changed the elliptically polarized light ray into substantially linearly polarized light ray." The Examiner then cites Saiki for a disclosure that "an optical compensator can be used to change linearly polarized light into

elliptically polarized light and vice versa (col. 5, lines 35-47)." The Examiner concludes that "it would have been obvious to one skilled in the art at the time of the invention was made to employ such Shimoshikiryou et al. optical compensators having a function of changing the polarization direction of a linearly polarized light ray aligning the elliptically polarized light ray (for the second optical compensator) in a particular wavelength (e.g., visible wavelength) since it is common practice in the art in order to improved display irregularities (see field of invention)."

Applicant strongly disagrees. Nothing in either of the cited references or in their combination would have suggested to one of ordinary skill in the art to make a NB LCD display device wherein

> a first optical compensator is provided between one of the two polarizers and the liquid crystal cell so as to compensate for the wavelength dependence of the angle of rotation of polarized light passing through the liquid crystal layer in a black display state, and
>
> a second optical compensator is provided between the first optical compensator and that polarizer so as to compensate for the wavelength dependence of the ellipticity of the polarized light passing through the liquid crystal layer in the black display state.

Shimoshikiryou is directed to a NB LCD device having electrodes for producing a transverse electric field component. It describes two optical compensators provided between the liquid crystal cell and a polarizer. However, both optical compensators are described as phase difference compensators - the first one having an arrow representing an axis along which the refractive index ellipsoid of the phase difference compensator (having positive, uniaxial characteristics)has a maximum refractive index, and the second one being a biaxial phase difference compensator where a first arrow extending in the normal direction to the plane of the compensator represents an axis along which the compensator as whole has maximum refractive index and a second arrow extending in the plane of the compensator represents an axis of the maximum refractive index in the plane of the compensator (Fig. 1; col. 9, lines 36-49).

Nowhere does Shimoshikiryou teach or suggest that

a first optical compensator is provided between one of the two polarizers and the liquid crystal cell so as to compensate for the wavelength dependence of the angle of rotation of polarized light passing through the liquid crystal layer in a black display state, and

a second optical compensator is provided between the first optical compensator and that polarizer so as to compensate for the wavelength dependence of the ellipticity of the polarized light passing through the liquid crystal layer in the black display state,

Nowhere does Shimoshikiryou teach or suggest that it would be desirable, for example, to utilize a first optical compensator between one of the two polarizers and the liquid crystal cell to compensate for the wavelength dependence of the angle of rotation of polarized light passing through the liquid crystal layer in a black display state **and** a second optical compensator between the first optical compensator and that polarizer to compensate for the wavelength dependence of the ellipticity of the polarized light passing through the liquid crystal layer in the black display state.

Saiki fails to make up for the deficiencies of Shimoshikiryou. Sakai also fails to teach or suggest that

a first optical compensator is provided between one of the two polarizers and the liquid crystal cell so as to compensate for the wavelength dependence of the angle of rotation of polarized light passing through the liquid crystal layer in a black display state, and

a second optical compensator is provided between the first optical compensator and that polarizer so as to compensate for the wavelength dependence of the ellipticity of the polarized light passing through the liquid crystal layer in the black display state.

Saiki describes a polarizing plate with an optical compensation film and liquid crystal display. At column 5, lines 35-47 (cited by the Examiner), Saiki describes retardation plates

such as a quarter wavelength plate and a half wavelength plate. At column 4, lines 13 *et seq.*, Saiki distinguishes between various optical elements used in LCD displays, specifically identifying retardation plate and viewing angle compensation film as different elements. No suggestion is made by Saiki to use an optical compensator "having a function of changing the polarization direction of a linearly polarized light ray aligning the elliptically polarized light ray (for the second optical compensator) in a particular wavelength (e.g., visible wavelength) since it is common practice in the art in order to improved display irregularities" in the construction of Shimoshikiryou, as suggested by the Examiner.

No suggestion is made by Saiki that it may even be desirable to use an optical compensator "having a function of changing the polarization direction of a linearly polarized light ray aligning the elliptically polarized light ray (for the second optical compensator) in a particular wavelength (e.g., visible wavelength) since it is common practice in the art in order to improved display irregularities" in the construction of Shimoshikiryou, as suggested by the Examiner. Even if one of ordinary skill in the art were to try to combine Saiki with Shimoshikiryou, which compensator should be substituted?

Thus, it is not seen how the invention as set forth in claim 1 would have been obvious to one of ordinary skill in the art in view of any combination of Shimoshikiryou and Saiki.

The dependent claims are patentable for at least the same reasons as claim 1.

In view of the discussion above, it is respectfully submitted that the present application is in condition for allowance. An early reconsideration and notice of allowance are earnestly solicited.

If for any reason a fee is required, a fee paid is inadequate or credit is owed for any excess fee paid, the Commissioner is hereby authorized and requested to charge Deposit Account No. **04-1105.**

Respectfully submitted,

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George W. Neuner (Reg. No. 26,964)

EDWARDS ANGELL PALMER & DODGE, LLP
P.O. Box 55874
Boston, MA 02205
Tel: (617) 439-4444

Customer No. 21874

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